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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/869,324	07/24/2001	Rainer Dyllick-Brenzinger	210184US0PCT	1533
22850	7590	05/21/2004	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			METZMAIER, DANIEL S	
			ART UNIT	PAPER NUMBER
			1712	

DATE MAILED: 05/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/869,324	DYLLICK-BREZNINGER ET AL.	
	Examiner	Art Unit	
	Daniel S. Metzmaier	1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 17-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 7-10, 17, 18 and 21 is/are rejected.
- 7) ☒ Claim(s) 3, 5, 6, 19 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)          |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. <u>05132004</u>                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### DETAILED ACTION

Claims 1-10 and 17-21 are pending. This Action is responsive to applicants' response filed February 19, 2004.

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-2, 4, 7-10, 17-18 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henkel, DE 28 51 832 (cited in IDS), as evidenced by Derwent Abstract 1980-45188C and the English language Translation PTO 04-0769. Henkel (Derwent Abstract) discloses foam inhibitors reading on the claimed materials for use in resin dispersions. Henkel (Table 1, page 10) discloses, at least as S<sub>6</sub>, a compound

reading on the claimed materials. Henkel (Derwent Abstract) discloses the materials are used in concentrations of 0.1 to 5 %. Henkel (page 13, examples 17 and 18) disclose the addition of foam inhibitors S<sub>1</sub> or S<sub>2</sub> in an oily mixture containing ethoxylated alcohol into a 25% by weight dispersion of polyvinylacetate. See Henkel page 9, lines 25-37 for suitable polymer types to be treated.

At the point of addition, the foam inhibitor composition would have been dispersed as an oil in water emulsion due to the hydrophobic nature of the foam inhibitor ingredients.

Henkel differs from the claims in the exemplified use of the instantly claimed materials as the foam inhibitor.

It would have been obvious to one of ordinary skilled in the art at the time of applicants' invention to employ the specific species, S<sub>6</sub>, disclosed in the Henkel reference as obvious functional equivalent foam inhibitor species in the resin dispersions as disclosed in the Henkel reference.

The specific species, S<sub>6</sub>, disclosed in the Henkel reference, reads on applicants' claimed foam generic inhibitors read in light of the specification. The products set forth in the specification at page 4, lines 3-4, do not require a terminal hydroxyl group and make clear that applicants contemplate 2-hydroxy-substituted sulfides.

#### ***Allowable Subject Matter***

4. Claims 3, 5, 6 and 19-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

5. Applicant's arguments filed February 17, 2004 have been fully considered but they are not persuasive.
6. Applicants (page 8 of said filing) assert the examiner is incorrect in his conclusion because S<sub>6</sub> of Henkel is a 2-hydroxy-dioctadecyl sulfide rather than the instant claims wherein the compounds have a terminal hydroxyl group, claimed as 1-ols. This has not been deemed persuasive since claims; "During patent examination, the pending claims must be "given \*>their< broadest reasonable interpretation consistent with the specification." > In re Hyatt, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000)." MPEP 2111. The structure of 2-hydroxy-dioctadecyl sulfide may be depicted as  $\text{CH}_3\text{-C(OH)-CH(CH}_2\text{)}_{15}\text{-S-CH(CH}_2\text{)}_{15}\text{-CH}_2\text{-CH}_3$ . Said compounds are consistent with compounds of formula II on page 3 of Henkel.

The methods of making the instantly claimed compounds at page 3, lines 36 et seq of the instant specification , wherein mercapto alcohols are reacted with  $\alpha$ -olefins and characterizes materials at page 4, lines 1-14, of the specification. The resulting products set forth at page 4, lines 3-4, do not require a terminal hydroxyl group and make clear that applicants contemplate 2-hydroxy-substituted sulfides. The claimed compounds therefore are deemed to read on the compounds wherein the hydroxyl has the same 2-position of the Henkel reference.

The claims are generic and do not set forth any specific chemical structure, wherein 3-thiaalkan-1-ol requires two carbons between the thio-ether and the hydroxyl

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group. The specification does not specifically define said generic compounds or the mercato alcohols that may be used to form said 3-thiaalkan-1-ol.

7. Applicants (page 8) assert Henkel is directed to powders rather than the oil-in-water dispersions. This has not been deemed persuasive because the Derwent Abstract clearly sets forth the materials may be added to resins dispersions as foam inhibitors. Applicants' claims that define the concentrations read on the additive concentrations as foam inhibitors. Claims 5 and 6 set forth a concentration for a polymeric stabilizer rather than a polymer resin dispersion.


### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel S. Metzmaier whose telephone number is (703) 308-0451. The examiner can normally be reached on 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**Daniel S. Metzmaier**  
**Primary Examiner**  
**Art Unit 1712**

DSM